

AMENDMENTS TO THE CLAIMS

1 1. (Currently Amended) A method for performing operations in an electronic file
2 system, the method comprising the steps of:
3 receiving a command to perform one or more file system operations, wherein said
4 command expressly identifies said one or more file system operations;
5 in response to said command, ~~performing~~ translating a plurality of operations
6 including said one or more file system operations into database commands;
7 and
8 ~~wherein the step of performing the plurality of operations includes:~~
9 a database server executing said database commands, wherein the step of executing
10 includes:
11 performing a first subset of said database commands that corresponds to a first
12 subset of said plurality of operations as part of a first transaction; and
13 performing a second subset of said database commands that corresponds to a
14 second subset of said plurality of operations as part of a second
15 transaction that is nested in said first transaction,
16 wherein each of said one or more file system operations is included in ~~at least~~
17 one of the first subset of said plurality of operations and the second
18 subset of said plurality of operations.

1 2. (Currently Amended) The method of Claim 1 wherein the step of
2 ~~performing the plurality of operations~~ executing further includes the step

3 of performing a third subset of said database commands that corresponds
4 to a third subset of said plurality of operations as part of a third
5 transaction that is nested in said second transaction.

1 3. (Original) The method of Claim 1 wherein the second subset of operations are
2 operations that are triggered by an operation that belongs to said first subset of
3 operations.

1 4. (Currently Amended) The method of Claim 1 wherein:
2 the step of receiving the command is performed by an entity that resides external to
3 [[a]] said database server; and
4 ~~the step of performing said plurality of operations includes~~ the method further
5 comprises said entity sending said database commands to said database server.

1 5. (Currently Amended) The method of Claim 4 wherein the step of performing said
2 second subset includes:
3 the entity sending to the database server a savepoint command for the database server
4 to establish a savepoint; and
5 after the entity sends to the database server a savepoint command, the entity sending
6 to the database server said second subset of said database commands for
7 performing said second subset of said plurality of operations.

1 6. (Currently Amended) The method of Claim 5 further comprising the entity
2 responding to a failure of an operation in said second subset of said plurality of
3 operations by sending to the database server a command to roll back to said savepoint.

1 7. (Original) The method of Claim 4 further comprising the entity maintaining a
2 transaction list by performing the steps of:
3 adding an entry to the tail of the transaction list when the entity sends a savepoint
4 command to the database server to start a nested transaction; and
5 when an operation fails, determining the savepoint to roll back to based on the entry
6 at the tail of the transaction list; and
7 removing the entry from the tail of the transaction list when the nested transaction
8 fails or completes successfully.

1 8. (Original) The method of Claim 3 wherein:
2 the one or more file system operations include an operation on a folder; and
3 the second subset of operations includes operations associated with one or more
4 documents within the folder.

1 9. (Original) The method of Claim 4 further comprising the steps of:
2 the entity determining whether all operations that are to be performed as a nested
3 transaction are read only;

4 if all operations that are to be performed as the nested transaction are read only, then
5 sending commands to perform the operations without first sending a command
6 to establish a savepoint; and
7 if all operations that are to be performed as the nested transaction are not read only,
8 then sending a command to establish a savepoint prior to sending commands
9 to perform the operations.

- 1 10. (Currently Amended) A computer-readable medium carrying instructions for
2 performing operations in an electronic file system, the computer-readable medium
3 comprising instructions for performing the steps of:
4 receiving a command to perform one or more file system operations, wherein said
5 command expressly identifies said one or more file system operations;
6 in response to said command, ~~performing~~ translating a plurality of operations
7 including said one or more file system operations into database commands;
8 and
9 ~~wherein the step of performing the plurality of operations includes:~~
10 a database server executing said database commands, wherein the step of executing
11 includes:
12 performing a first subset of said database commands that corresponds to a first
13 subset of said plurality of operations as part of a first transaction; and
14 performing a second subset of said database commands that corresponds to a
15 second subset of said plurality of operations as part of a second
16 transaction that is nested in said first transaction,

17 wherein each of said one or more file system operations is included in ~~at least~~
18 one of the first subset of said plurality of operations and the second
19 subset of said plurality of operations.

1 11. (Currently Amended) The computer-readable medium of Claim 10
2 wherein the step of ~~performing the plurality of operations~~ executing
3 further includes the step of performing a third subset of said database
4 commands that corresponds to a third subset of said plurality of
5 operations as part of a third transaction that is nested in said second
6 transaction.

1 12. (Original) The computer-readable medium of Claim 10 wherein the second
2 subset of operations are operations that are triggered by an operation that belongs to
3 said first subset of operations.

1 13. (Currently Amended) The computer-readable medium of Claim 10 wherein:
2 the step of receiving the command is performed by an entity that resides external to
3 [[a]] said database server; and
4 ~~the step of performing said plurality of operations includes~~ the computer-readable
5 medium further comprises instructions for performing the step of said entity
6 sending said database commands to said database server.

1 14. (Currently Amended) The computer-readable medium of Claim 13 wherein the step
2 of performing said second subset includes:

3 the entity sending to the database server a savepoint command for the database server
4 to establish a savepoint; and
5 after the entity sends to the database server a savepoint command, the entity sending
6 to the database server said second subset of said database commands for
7 performing said second subset of said plurality of operations.

1 15. (Currently Amended) The computer-readable medium of Claim 14 wherein the entity
2 responds to a failure of an operation in said second subset of said plurality of
3 operations by sending to the database server a command to roll back to said savepoint.

1 16. (Original) The computer-readable medium of Claim 13 further comprising
2 instructions for causing the entity to maintain a transaction list by performing the
3 steps of:
4 adding an entry to the tail of the transaction list when the entity sends a savepoint
5 command to the database server to start a nested transaction; and
6 when an operation fails, determining the savepoint to roll back to based on the entry
7 at the tail of the transaction list; and
8 removing the entry from the tail of the transaction list when the nested transaction
9 fails or completes successfully.

1 17. (Original) The computer-readable medium of Claim 12 wherein:
2 the one or more file system operations include an operation on a folder; and

3 the second subset of operations includes operations associated with one or more
4 documents within the folder.

1 18. (Original) The computer-readable medium of Claim 13 further comprising
2 instructions for performing the steps of:
3 the entity determining whether all operations that are to be performed as a nested
4 transaction are read only;
5 if all operations that are to be performed as the nested transaction are read only, then
6 sending commands to perform the operations without first sending a command
7 to establish a savepoint; and
8 if all operations that are to be performed as the nested transaction are not read only,
9 then sending a command to establish a savepoint prior to sending commands
10 to perform the operations.

1 19. (New) The computer-readable medium of Claim 10 wherein said one or more file
2 system operations include one of an operation for copying a file and an operation for
3 copying a folder.

1 20. (New) The method of Claim 1 wherein said one or more file system operations
2 include one of an operation for copying a file and an operation for copying a folder.